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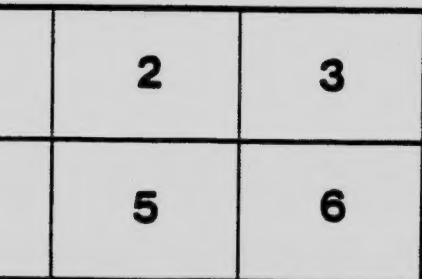
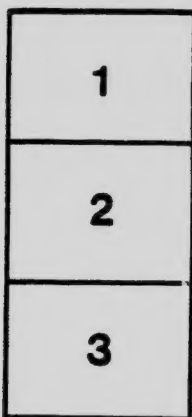
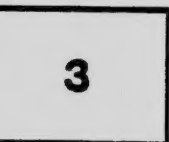
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DOMINION OF CANADA
DEPARTMENT OF AGRICULTURE
EXPERIMENTAL FARMS
DIVISION OF BOTANY
(Farmers' Circular No. 1.)

POTATO CANKER

(*Chrysophlyctis endobiotica*, Schilb.)

IMPORTED INTO CANADA.

BY
H. T. GÜSSOW,
Dominion Botanist.

PUBLISHED BY THE DIRECTION OF THE HON. MARTIN BURRELL, MINISTER OF AGRICULTURE

OTTAWA, MAY, 1912

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OTTAWA, ONT., May 7, 1912.

To the Honourable the Minister of Agriculture,
Ottawa, Ont.

SIR,—I have the honour to submit for your approval Farmers' Circular No. 1,—
'Potato Canker Imported into Canada,' prepared by Mr. H. T. Güssow, Dominion
Botanist. This circular deals briefly with Potato Canker, inoculation with which
apparently unpreventable and incurable potato disease, Canadian soils are threatened.

The fact that the potato crop in Canada, even at this early stage in her develop-
ment, runs from sixty to ninety millions bushels, worth from thirty-five to fifty mil-
lion dollars annually, indicates the importance of every citizen, as well as the dif-
ferent Provincial governments and the Federal government doing everything in their
power to prevent the introduction of this most dangerous potato disease into our soils.

The wide distribution of the brief statement of facts in connection with this
matter, as given in the circular, should do much to make clear to our citizens the
importance of their uniting with the government to insure that none of the potatoes
recently imported from Europe shall find their way into the soil as seed.

I have the honour to be, Sir,

Your obedient servant,

J. H. GRISDALE,

Director, Dominion Experimental Farms.

POTATO CANKER HAS BEEN IMPORTED INTO CANADA.

Owing to the light potato crop in the Dominion in 1911, importations of potatoes became a necessity. Generally speaking, these importations were intended for table use only, but as the season advanced a considerable number of inquiries have been received from farmers respecting the use for seed of such imported potatoes.

For this reason it would seem advisable to warn potato growers against the use for seed of potatoes imported from the British Isles and other European countries.

Not only has it been found that European varieties do not yield as well as the Canadian, but the very destructive and communicable disease known as Potato Canker (*Chrysophlyctis endobiotica*, Schillb.) has recently been discovered in a shipment of potatoes imported from England.

Bulletin 63, issued by the Central Experimental Farm, Ottawa, fully describes and gives illustrations of this disease, copies of which may be had free on application.

The following points will enable farmers and others interested in growing potatoes to realize the exceedingly dangerous nature of this disease, the establishment of which in this country would be nothing short of a national calamity.

1. The only way in which the disease can be introduced is through the planting of affected tubers.

2. The use of diseased tubers for seed may, in the worst cases, result in the complete destruction of the entire crop.

3. When once introduced the disease germ infests the soil for a period of eight years, which means that for at least eight years no sound potatoes can be raised on land thus infected.

4. None of the known remedies for other plant diseases will prevent the appearance of the disease.

5. The disease is spread readily through infested soil carried by wind, animals, farm implements, old bags or other means.

The common Late Blight (*Phytophthora infestans*) which is well known to every potato grower, and which may at times assume a very destructive character, is easily prevented by spraying; Potato Canker, however, is much more serious than this or any other potato disease at present known.

This destructive disease has now been discovered in potatoes imported from England.

Every care has been exercised to prevent the distribution of shipments known to be infected. They have been destroyed immediately.

None of this disease exists at present in Canadian soil. Within a few days the planting of potatoes will be general throughout the country. In view of this fact every person interested in growing potatoes on however large or small a scale is hereby strongly urged to refrain from using for seed any kind of potatoes imported from the British Isles or other European countries.

Even though such potatoes may appear to be sound in every way, and though they may be cheaper than Canadian grown, they will almost certainly—if used for seed—be the means of establishing this most dangerous disease.

And as already indicated, this disease, once established, will result in causing an incalculable injury to the profitable and important potato growing industry.

It has now been decided to rigorously proceed against any person using such imported potatoes for seed, as indicated by the following provisions under the Destructive Insect and Pest Act:

'It shall be illegal to sell, offer for sale, dispose of in any way, receive or use, for seed purposes, any potatoes imported from Europe.'

'Every person using for seed other potatoes than such as have been raised by himself must obtain, preserve and exhibit on demand, previous to planting, a certificate from the seller or his agent stating that the potatoes to be used for seed have not been imported from Europe.'

'Compensation not exceeding two-thirds of the value as assessed by the inspector, of the vegetation or vegetable matter or containers thereof destroyed by the instruction of an inspector, shall be granted by the Governor in Council upon the recommendation of the minister, except in cases where these regulations are carried out under the direction of the government of a province not granting compensation, or in the case of potatoes or potato crops.'

'Every person who contravenes any provision of this Act or any regulation made thereunder, shall be liable, upon summary conviction, to a fine not exceeding one hundred dollars, or to imprisonment for a term not exceeding six months, or to both fine and imprisonment. Any vegetable matter imported or brought into Canada contrary to this Act, or to any regulation made thereunder, shall be forfeited to the Crown.'

'The owner, occupier or lessee of any premises or place where any of the insects, pests or diseases specified herein shall be found, shall immediately notify the minister, and shall also send to him specimens of such insects, pests or diseases.'

In view of these provisions it may be pointed out that should the disease be discovered subsequent to the issue of this circular in any field or farm, the farmer or grower on whose land it is found will be asked to furnish evidence as to the origin of the potatoes used for seed, if no satisfactory care has been exercised he will not only render himself liable to fine or imprisonment provided under this Act, but will forfeit the entire crop without any compensation.

In conclusion it may be stated that up to the present Canadian soil is free from this disease, which, as is well known has defied every measure directed against its ravages in certain English and other European potato growing districts.

The effort needed to keep our soil free from this most injurious disease, which may lurk in practically every potato imported from Europe is very small. All that is necessary is that our potato growers exercise some little care in the selection of their seed. The result of carelessness in this small matter at this present moment of planting time approaching, is almost certain to effect irreparable injury to our exceedingly valuable potato growing industry, to say nothing of the millions of dollars it is practically certain to cost in the future to control the disease, when once established.



